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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,340	04/21/2004	Shuhei Yada	2004_0589A	5472

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/828,340

Applicant(s)

YADA ET AL.

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims such as "comprising" recited in lines 1, 3 and 13. Correction is required. See MPEP § 608.01(b).

The specification had not been checked to the extent necessary to determine the presence of all possible minor errors e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

Claims 1-8 are objected to because of the following informalities:

a). The addition of the word "type" such as in "column-type collection device" recited e.g., in claims 3-8 renders an otherwise definite expressions indefinite as it extends the scope of the expression. Ex parte copenhaver, 109 USPTO 118 (Bd App. 7955).

b). There are no proper antecedent basis for supports in the claims for the following recitations:

1. "the collection column "in claim 4; and
2. the column-type collection device" in claims 4 & 6.

c). The term "if" in claim 1, line 4 fails to ascertain the claimed invention with precision.

d). In claim 2, the "90 wt % or more" should be at least 90 wt % to avoid the alternative "or".

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the tie-in or relationship between the step of collecting and satisfying the formula $(B/A) < 1.25$ as recited in claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0778 255.

EP '255 discloses substantially the process or method as claimed, specifically " a method for collecting acrylic acid comprising the step of collecting acrylic acid using an aqueous medium from a reaction gas comprising acrylic acid obtained by catalytic vapor-phase oxidation of propane, propylene, and/or acrolein, "as broadly claimed in claim 1. See the abstract and the claims at cols. 11-12 of EP '255. While not positively recited, obviously the formula $B/A < 1.25$ is satisfied in EP '255 process or method. See e.g. , the examples at cols 6-11.

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

a) Kroker et al discloses the separation by distillation of liquid mixtures which contain (meth) acrylic acid .

b) Noll et al and EP '736 both disclose a process for the recovery of acrylic acid.

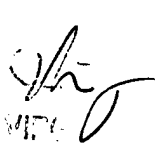
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571) 272-1450. The examiner can normally be reached on Tuesday-Friday from 7:30a.m to 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manoharan/tgd

January 14, 2005


VIRGINIA
MANOHARAN
1764
1/14/05